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STATE OF MONTANA
DIVISION OF FORENSIC SCIENCE
DEPARTMENT OF JUSTICE
275 West Front Street, Missoula, MT 59802 (406) 728-4970

Ronald L. Rivers, M.D.
State Medical Examiner

Arnold B. Melnikoff
Laboratory Bureau Chief

Dawn M. Kangas
Administrative Assistant

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FEBRUARY 1983

CONGRATULATIONS

To all the new county attorneys, sheriffs and coroners who have won the awesome responsibility of maintaining justice in Montana. Speaking for the Division as well as the medical examiners throughout the state, we pledge to assist you in the performance of your difficult task.

REMEMBER

The test tubes with a grey rubber stopper are to be used for blood to be tested for alcohol. There is a preservative in the tube that prevents further formation of alcohol. They can be sent by mail.

The red top tubes do not have any preservative.

HEROIN AND MUSHROOMS

Larry Pederson, our chief chemist, reports there have been two confirmed analyses of heroin recovered from suspects in Montana. This is a rare drug in this state and it is usually seen only in coastal cities.

We are receiving approximately three confiscated samples a month of hallucinogenic mushrooms. Recently a mushroom "factory" was seized. Mushroom material must be dried first or wrapped in paper before sending it to our office. Plant material will decompose in plastic bags if it is wet, destroying the controlled substances present.

FEBRUARY 1983

# ON CALL SCHEDULE - MONTANA STATE MEDICAL EXAMINER

275 W. Front Street
Missoula, Montana 59802

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5<br>RON<br>RIVERS |
| 6<br>RON<br>RIVERS | 7 | 8 | 9 | 10 | 11 | 12<br>JOHN<br>PFAFF |
| 13<br>JOHN<br>PFAFF | 14 | 15 | 16 | 17 | 18 | 19<br>KEN<br>MUELLER |
| 20<br>KEN<br>MUELLER | 21 | 22 | 23 | 24 | 25 | 26<br>JOHN<br>PFAFF |
| 27<br>JOHN<br>PFAFF | 28 | | | | | |

Telephone Numbers: State Office - 728-4970
WATS Line - 243-5796

Home Phone: Dr. Ron Rivers- 728-2033 (Home)
(week nights call unless otherwise indicated)

Dr. John Pfaff - Great Falls
Hospital - 727-3333
Home - 727-3905

Dr. Ken Mueller- Billings
Hospital - 657-7000
Home - 248-3024

SEXUAL ASSAULT
FEBRUARY 1983
R. L. Rivers, M.D.

"I found her!", echoed the voice of the deputy through the thick woods.

The young mother was last seen in her home at 2300 the night before. The husband returned home from work at 0400 and called the sheriff. There was no evidence of a struggle and the children were still asleep. None of the neighbors in this isolated mountain community had heard anything strange.

And yet, here she is in a blood soaked nightgown, hands tied over her head to a tree, and multiple obvious stab wounds over her nearly naked body.

The coroner carefully cut and labelled the ends of the rope as he released her hands from the tree. Without disturbing any knots in the rope he carefully covered the hands with clean paper bags. He then wrapped the entire body in clean sheets.

"Dave", the sheriff asked the coroner, "See if Doc can tell if she has been raped and ask him if he thinks there were more than one guy."

QUESTIONS:

1) What can be learned from the rope used to tie the victim's hands?

2) What evidence may be found on the hands?

3) What evidence can Doc collect and say she was raped?

4) What evidence may indicate that there was more than one assailant?

ANSWERS

1. The rope may match rope found with the suspect. Or the cut ends may match. Sometimes the knots may be peculiar to a certain individual. This may involve them in other crimes.

2. The hands may contain -
   - Hair - from the suspects head
   - Fibers - from the suspects clothing
   - Blood or tissue - from the suspect
   - Soil - from another area (some victims are murdered in one place and then dumped in another)
   - Paint, glass, wood and other framents of material that may tie in the suspect.

3. None! Only a judge or jury can prove she was assaulted. The doctor can find evidence of penetration and ejaculation however.

   The body and clothing are first examined with a Woods or ultraviolet lamp for the presence of fluorescent sperm. Then the appropriate hair samples and fingernail clippings are collected.

   Swabs and smears of the vaginal, oral and rectal mucosa are taken and wet mounts examined for motile sperm.

   Photographs are taken of any mucosal lacerations or bitemarks.

4. Various blood group substances in the seminal fluid may indicate the possibility of more than one assailant. The shape of the stab wounds may indicate that more than one type of knife was used.